

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Onoue Sei-ichi et al.  
Appl. No. : 10/396,590  
Filed : Jun 16<sup>th</sup>, 2006  
For : Aqueous Coating Composition  
Examiner : Karuna P. Reddy  
Group Art Unit : 1796

Confirmation No. : 8151

DECLARATION UNDER 37 C.F.R. §1.132

**Mail Stop Amendment**  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

I, Seiichi Onoue declares and states that:

1. I am a co-inventor of the above identified patent application and familiar with the specification and prosecution history.
2. I received a Master's Degree in Engineering in 1999 from KINKI University.
3. Since 1999, I have been employed by SK KAKEN CO. LTD, and working as an engineer for 9 years.
4. I have prepared Examples 1-1 through 1-7 and comparative Example 1-1 through 1-3 according to the disclosure in the specification. I then conducted a Bleed-out resistance test described in the present specification at page 13, line 17. The test results are presented in the table attached to this Declaration.
5. Comparative Example 1-2 is equivalent to the aqueous coating composition described in the Storrow reference. While comparative Example 1-1 and 1-3 did provide sufficient Bleed-out resistance, these compositions were deficient in other ways, as can be seen in Table 2 of the specification on page 37. It can be seen that all of the Examples

with the neutral silica sol indicate good Bleed-out resistance while Comparative Example 1-2 with colloidal silica sol indicates a poor result.

6. I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful, false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or patent issuing therefrom.

Dated: July 24, 2008

By: Seiichi Onoue  
Seiichi Onoue

<Bleed-out (Efflorescence) resistance test>

SK Mirac Sealer Eco (acrylic resin primer; manufactured by SK KAKEN Co., Ltd.) was spray-painted onto a flexible plate having a size of 300 × 300 × 6 mm so as to achieve a dry film thickness of 30 μm and the plate was dried for 2 hours under normal conditions.

Then, a mixed solution of 100 parts by weight of water and 5 parts by weight of calcium hydroxide was applied in an application amount of 100 g/m<sup>2</sup> and the plate was dried for 8 hours under normal conditions.

Next, a coating composition was spray-painted so as to achieve a dry film thickness of 40 μm and the plate was cured for 24 hours at a temperature of 5°C and a relative humidity of 30% to produce a test object.

The surface of the obtained test object was subjected to a Bleed-out (an Efflorescence) resistance test. The evaluation was made as follows. The results are shown in Table 2.

Good ○ : No efflorescence was observed

Poor × : Efflorescence was observed

The term "Efflorescence resistance" is in the Japanese specification. However in the English specification, the corresponding word of the term is translated as "Bleed-out resistance" to explain the Efflorescence resistance simply.

3#

Table 2

[illegible]